

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A routing system operable to link a mobile platform to the Internet, comprising:
 - a ground based communications link manager communicatively linkable to the a first mobile platform;
 - at least one ground based prefix server in operable communication with the communications link manager;
 - an initial destination address assignable to the first mobile platform; and
 - a local prefix number pool operable to store a limited quantity of prefix numbers each received from any of a plurality of mobile platforms upon completion of a trip of any of the plurality of mobile platforms; and
 - a prefix server program operable to select one of the limited quantity of prefix numbers from the local prefix number pool and communicate the initial destination address of the first mobile platform to the communications link manager and to the Internet.
2. (currently amended) The system of Claim 1, ~~comprising a prefix number selectable from a plurality of prefix numbers~~, wherein the initial destination address of the first mobile platform is assignable from the selected prefix number.

3. (original) The system of Claim 1, wherein the prefix server and the communications link manager are in operable communication with the Internet using a global border gateway protocol.

4. (original) The system of Claim 1, wherein the prefix server and the ground based communications manager are in operable communication with the Internet using at least one of a plurality of Internet service providers.

5. (currently amended) The system of Claim 1, wherein a new destination address is communicable to the Internet using the prefix server during a travel segment of the first mobile platform.

6. (original) The system of Claim 5, wherein the new destination address is operatively communicable to the Internet using a second communications link manager.

7. (currently amended) A method for operating a mobile platform communications system prefix server, comprising:

storing in a local prefix number pool a plurality of prefix numbers received from any of a plurality of mobile platforms upon completion of a trip of any of the plurality of mobile platforms;

selecting a prefix number from a the plurality of prefix numbers;

linking a mobile autonomous system number to the prefix number operable by the prefix server to aggregate a plurality of routes within the local prefix number pool;

linking the prefix number with the mobile autonomous system number to a mobile platform identification number;

linking the prefix number with the mobile autonomous system number to a mobile platform destination address; and

signaling to at least one Internet service provider the location of the mobile platform destination address.

8. (currently amended) The method of Claim 7, further comprising:

adding data transfer routes between the mobile platform destination address and the at least one Internet service provider;

confirming if a two-way communications path is open between a mobile platform and a ground communications link manager; and

withdrawing the data transfer routes when the two-way communications path is broken.

9. (currently amended) The method of Claim 7, further comprising positioning the prefix server as a ground based unit.

10. (currently amended) The method of Claim 7, further comprising injecting a plurality of network layer reachability information into an internal border gateway protocol network.

11. (currently amended) The method of Claim 7, further comprising notifying a plurality of route servers of the prefix number.

12. (currently amended) A method for maintaining communications contact between a mobile platform and the Internet during a travel segment of the mobile platform using at least one ground based communications link manager, the method comprising:

creating at least one ground based prefix server operable to communicatively link the mobile platform and the at least one communications link manager;

storing in an initially empty local prefix number pool a plurality of prefix numbers after use by a plurality of mobile platforms;

programming the prefix server to operatively select a one of the plurality of prefix numbers for the mobile platform from ~~a plurality of prefix numbers~~ the local prefix number pool;

assigning the prefix number to the mobile platform for the travel segment; and

signaling via the prefix server a destination address of the mobile platform using the prefix number communicated via the at least one communications link manager.

13. (currently amended) The method of Claim 12, further comprising:
selecting a new prefix number upon initiation of a new travel segment of the mobile platform;
creating a new destination address using the prefix server; and
signaling the new destination address using the prefix server during the new travel segment of the mobile platform to operatively maintain communication between the mobile platform and the Internet.

14. (currently amended) The method of Claim 12, further comprising:
establishing a two-way communication path between the mobile platform and the at least one communications link manager; and
adding a plurality of route paths using the prefix server after the two-way communication is established.

15. (currently amended) The method of Claim 14, further comprising withdrawing the route paths when the two-way communication ends.

16. (currently amended) The method of Claim 12, further comprising mapping a unique aircraft identification number to the assigned prefix number using the prefix server.

17. (currently amended) The method of Claim 12, further comprising injecting a plurality of network layer reachability information using the prefix server.

18. (currently amended) The method of Claim 12, further comprising notifying a plurality of Internet route servers of the selected prefix number using the prefix server.

19. (currently amended) The method of Claim 12, further comprising initially allocating the plurality of prefix numbers to a global pool of prefix numbers.

20. (currently amended) ~~The method of Claim 19, comprising:~~ A method for maintaining communications contact between a mobile platform and the Internet during a travel segment of the mobile platform using at least one ground based communications link manager, the method comprising:

creating at least one ground based prefix server operable to communicatively link the mobile platform and the at least one communications link manager;

programming the prefix server to operatively select a prefix number for the mobile platform from a plurality of prefix numbers;

assigning the prefix number to the mobile platform for the travel segment;

signaling via the prefix server a destination address of the mobile platform using the prefix number communicated via the at least one communications link manager;

initially allocating the plurality of prefix numbers to a global pool of prefix numbers;

creating a local pool operable to contain a first portion of the plurality of prefix numbers; and

assigning the local pool to an autonomous system in operable communication with the Internet.

21. (currently amended) The method of Claim 20, further comprising programming the prefix server to initially select the prefix number from the local pool.

22. (currently amended) The method of Claim 21, further comprising programming the prefix server to operatively select the prefix number from the global pool if the local pool is empty.

23. (currently amended) The method of Claim 20, further comprising programming the prefix server to add the prefix number to the local pool upon completion of the travel segment.

24. (currently amended) The method of Claim 23, further comprising:
programming the prefix server to add the prefix number to the
global pool only if the local pool is in a full condition; and
withdrawing a plurality of route paths operably forwarded by the
prefix server only if the prefix number is added to the global pool.

25. (currently amended) A method for maintaining communications contact between a mobile platform and the Internet during a travel segment of the mobile platform using at least one ground based communications link manager, the method comprising:

creating at least one ground based prefix server operable to communicatively link the mobile platform and the at least one communications link manager;

programming the prefix server to operatively select a prefix number for the mobile platform from a plurality of prefix numbers for the travel segment of the mobile platform;

submitting a mobile platform request for the prefix number at the initiation of the travel segment;

assigning the prefix number to a mobile platform identification number;
and

operating the prefix server to signal a destination address of the mobile platform using the prefix number communicated via the at least one communications link manager.

26. (currently amended) The method of Claim 25, further comprising:

establishing a two-way communication path between the mobile platform and the at least one communications link manager; and

adding a first plurality of Internet route paths using the prefix server after the two-way communication is established.

27. (currently amended) The method of Claim 26, further comprising withdrawing the first plurality of route paths when the two-way communication ends.

28. (currently amended) The method of Claim 27, further comprising:
selecting a new prefix number during the travel segment of the mobile platform when the two-way communication ends; and
creating a new destination address from the new prefix number using the prefix server.

29. (currently amended) The method of Claim 28, further comprising:
establishing a new two-way communication path between the mobile platform and the at least one communications link manager;
signaling the new destination address using the prefix server during a new travel segment of the mobile platform to operatively maintain communication between the mobile platform and the Internet; and
adding a second plurality of route paths using the prefix server.

30. (currently amended) The method of Claim 25, further comprising notifying a plurality of Internet route servers of the selected prefix number using the prefix server.

31. (currently amended) The method of Claim 25, further comprising programming the prefix server to operatively notify at least one other prefix server of the plurality of prefix servers that a mapping of a mobile platform identification number to a route is invalid at an end of the travel segment.

32. (currently amended) The method of Claim 25, further comprising linking a mobile autonomous system number to the prefix number.

33. (currently amended) The method of Claim 32, further comprising modifying a network layer reachability information message using the prefix server.

34. (currently amended) The method of Claim 32, further comprising aggregating a plurality of route paths using the prefix server.

35. (currently amended) The method of Claim 32, further comprising inserting a single network layer reachability information message for a plurality of route paths.